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Citizenship: U.S.A.

Education: Ph.D. in Physics, University of Wisconsin-Madison, 1999  
M.S. in Physics, University of Wisconsin-Madison, 1995  
B.S. in Physics, University of Illinois-Urbana, 1992

## Research

Experience: Research Associate, 1999-present, University of Rochester  
CDF experiment at Fermilab  
– Searching for  $t\bar{t}$  events with tau leptons in CDF data  
– Crucial in creation of CDF's uniform Monte Carlo production  
– Co-convener of Fermilab Advanced Analysis Group  
– Leader of Consumer-Server/Logger project at CDF  
– Leader of Consumer-Server/Logger upgrade project for Run 2B

Research Assistant, 1993-1998, University of Wisconsin-Madison  
ZEUS experiment in Hamburg, Germany  
– Made first observation of direct photons in photoproduction at HERA  
– Trigger expert for Jets and High  $E_T$  physics group  
– Debugged/maintained hardware and software of Level1 calorimeter trigger

## Teaching

Experience: Graduate Teaching Assistant, 1992-1993,  
University of Wisconsin-Madison  
Led discussion and laboratory sections of a two semester introductory  
physics course for undergraduates

Honors: German Academic Exchange Service (DAAD) Scholarship, 1994  
Graduated Magna Cum Laude, University of Illinois - Urbana, 1992  
Edmund James Scholar, University of Illinois - Urbana, 1988-1991  
ITT College Scholarship, 1988-1992  
Joseph Blazek Foundation Scholarship, 1988-1992  
Illinois State Scholar, 1988-1992  
AMVETS Scholarship, 1988-1989  
Marquette National Bank Scholarship, 1988-1989  
Illinois High School All-State Academic Team, 1988

## Selected Presentations

“Advanced Multivariate Analysis Methods”, University of Rochester Seminar, July 18, 2002, Rochester, New York.

“Support Vector Machines in Analysis of Top Quark Production”, VIII International Workshop on Advanced Computing and Analysis Techniques in Physics Research, ACAT2002, June 24-28, 2002, Moscow, Russia.

“Support Vector Machines in Analysis of Top Quark Production”, Advanced Statistical Methods in Particle Physics, March 18-22, 2002, Durham, UK.

“Top Production Properties at the Tevatron”, IV Rencontres du Vietnam, International Conference on Physics at Extreme Energies, July 19-25, 2000, Hanoi, Vietnam.

“Observation of Isolated High- $E_T$  Photons in Hard Photoproduction at HERA”, PHOTON'97, May 10-15, 1997, Egmond aan Zee, The Netherlands.

“Observation of Isolated High- $E_T$  Photons in Hard Photoproduction at HERA”, DPF'96, August 10-15, 1996, Minneapolis, Minnesota, USA.

## Selected Publications

R.K. Bock *et al.*, “Methods for multidimensional event classification: a case study using images from a Cherenkov gamma-ray telescope”, Nuclear Instruments and Methods in Physics Research A **516** (2004) 511.

A. Vaiciulis, “Support vector machines in analysis of top quark production,” Nucl. Instrum. Meth. A **502**, 492 (2003) [arXiv:hep-ex/0205069].

M. Shimojima, B. J. Kilminster, K. S. McFarland, A. Vaiciulis and D. J. Holmgren, “Consumer-Server/Logger System For The Cdf Experiment,” IEEE Trans. Nucl. Sci. **47**, 236 (2000).

A. W. Vaiciulis, “Observation Of Isolated High Transverse Photons In Photoproduction At Hera,” Doctoral Dissertation, UMI-99-14789.

J. Breitweg *et al.*, “Observation of isolated high- $E(T)$  photons in photoproduction at HERA,” Phys. Lett. B **413**, 201 (1997) [arXiv:hep-ex/9708038].

S. Silverstein *et al.*, “The Zeus Calorimeter First Level Trigger,” Nucl. Instrum. Meth. A **360**, 322 (1995).

## Publications as Member of CDF Collaboration

- D. Acosta *et al.*, “Search for the flavor-changing neutral current decay  $D^0 \rightarrow \mu^+ \mu^-$  in p anti-p collisions at  $\sqrt{s} = 1.96\text{-TeV}$ ,” Phys. Rev. D **68**, 091101 (2003) [arXiv:hep-ex/0308059].
- D. Acosta *et al.* [CDF II Collaboration], “Measurement of the mass difference  $m(D/s^+) - m(D^+)$  at CDF II,” Phys. Rev. D **68**, 072004 (2003) [arXiv:hep-ex/0310043].
- D. Acosta *et al.*, “Measurement of prompt charm meson production cross sections in p anti-p collisions at  $\sqrt{s} = 1.96\text{-TeV}$ ,” Phys. Rev. Lett. **91**, 241804 (2003) [arXiv:hep-ex/0307080].
- D. Acosta *et al.*, “Search For Associated Production Of Upsilon And Vector Boson In P Anti-P Collisions At  $\sqrt{s} = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **90**, 221803 (2003).
- D. Acosta *et al.*, “Central pseudorapidity gaps in events with a leading antiproton at the Fermilab Tevatron anti-p p collider,” Phys. Rev. Lett. **91**, 011802 (2003) [arXiv:hep-ex/0303011].
- D. Acosta *et al.*, “Search for the supersymmetric partner of the top quark in dilepton events from p anti-p collisions at  $\sqrt{s} = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **90**, 251801 (2003) [arXiv:hep-ex/0302009].
- D. Acosta *et al.*, “Cross section for forward J/psi production in pp collisions at  $\sqrt{s} = 1.8\text{ TeV}$ ,” Phys. Rev. D **66**, 092001 (2002).
- D. Acosta *et al.*, “Search for long-lived charged massive particles in anti-p p collisions at  $\sqrt{s} = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **90**, 131801 (2003) [arXiv:hep-ex/0211064].
- D. Acosta *et al.*, “Search for a W' boson decaying to a top and bottom quark pair in 1.8-TeV p anti-p collisions. ((B)),” Phys. Rev. Lett. **90**, 081802 (2003) [arXiv:hep-ex/0209030].
- D. Acosta *et al.*, “Search for radiative b-hadron decays in p anti-p collisions at  $\sqrt{s} = 1.8\text{-TeV}$ . ((C)),” Phys. Rev. D **66**, 112002 (2002) [arXiv:hep-ex/0208035].
- D. Acosta *et al.*, “Momentum distribution of charged particles in jets in dijet events in p anti-p collisions at  $\sqrt{s} = 1.8\text{-TeV}$  and comparisons to perturbative QCD predictions,” Phys. Rev. D **68**, 012003 (2003).
- D. Acosta *et al.*, “Measurement of the ratio of b quark production cross sections in anti-p p collisions at  $\sqrt{s} = 630\text{-GeV}$  and  $\sqrt{s} = 1800\text{-GeV}$ ,” Phys. Rev. D **66**, 032002 (2002) [arXiv:hep-ex/0206019].
- D. Acosta *et al.*, “Branching ratio measurements of exclusive B+ decays to charmonium with the Collider Detector at Fermilab,” Phys. Rev. D **66**, 052005 (2002).
- D. Acosta *et al.*, “Limits on extra dimensions and new particle production in the exclusive photon and missing energy signature in p anti-p collisions at  $\sqrt{s} = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **89**, 281801 (2002) [arXiv:hep-ex/0205057].
- D. Acosta *et al.*, “Measurement of B meson lifetimes using fully reconstructed B decays produced in p anti-p collisions at  $\sqrt{s} = 1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 092009 (2002).

- D. Acosta *et al.*, “Search for new physics in photon lepton events in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **89**, 041802 (2002) [arXiv:hep-ex/0202044].
- D. Acosta *et al.*, “Upsilon production and polarization in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **88**, 161802 (2002).
- D. Acosta *et al.*, “Comparison of the isolated direct photon cross sections in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$  and  $s^{**}(1/2) = 0.63\text{-TeV}$ ,” Phys. Rev. D **65**, 112003 (2002) [arXiv:hep-ex/0201004].
- D. Acosta *et al.*, “Soft and hard interactions in p anti-p collisions at  $s^{**}(1/2) = 1800\text{-GeV}$  and  $630\text{-GeV}$ ,” Phys. Rev. D **65**, 072005 (2002).
- D. Acosta *et al.*, “Measurement of the B+ total cross section and B+ differential cross section  $d\sigma/dp(T)$  in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 052005 (2002) [arXiv:hep-ph/0111359].
- D. Acosta *et al.*, “Search for single top quark production in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 091102 (2002) [arXiv:hep-ex/0110067].
- D. Acosta *et al.*, “Search for the decay  $B/s \rightarrow \mu^+ \mu^- \Phi$  in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 111101 (2002).
- T. Affolder *et al.*, “Charged jet evolution and the underlying event in proton anti-proton collisions at  $1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 092002 (2002).
- D. Acosta *et al.*, “Search for new physics in photon lepton events in proton antiproton collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **66**, 012004 (2002) [arXiv:hep-ex/0110015].
- T. Affolder *et al.*, “Diffractive dijet production at  $s^{**}(1/2) = 630\text{-GeV}$  and  $1800\text{-GeV}$  at the Fermilab Tevatron,” Phys. Rev. Lett. **88**, 151802 (2002) [arXiv:hep-ex/0109025].
- D. Acosta *et al.*, “Study of the heavy flavor content of jets produced in association with W bosons in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **65**, 052007 (2002) [arXiv:hep-ex/0109012].
- T. Affolder *et al.*, “Measurement of the strong coupling constant from inclusive jet production at the Tevatron anti-p p collider,” Phys. Rev. Lett. **88**, 042001 (2002) [arXiv:hep-ex/0108034].
- T. Affolder *et al.*, “A study of  $B^0 \rightarrow J/\psi K^{*0} \pi^+ \pi^-$  decays with the Collider Detector at Fermilab,” Phys. Rev. Lett. **88**, 071801 (2002) [arXiv:hep-ex/0108022].
- T. Affolder *et al.*, “Search for new heavy particles in the W Z0 final state in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{ TeV}$ ,” Phys. Rev. Lett. **88**, 071806 (2002) [arXiv:hep-ex/0108004].
- T. Affolder *et al.*, “Observation of diffractive J/psi production at the Fermilab Tevatron,” Phys. Rev. Lett. **87**, 241802 (2001) [arXiv:hep-ex/0107071].
- T. Affolder *et al.*, “Charged particle multiplicity in jets in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **87**, 211804 (2001).
- T. Affolder *et al.*, “Search for quark lepton compositeness and a heavy W' boson

using the  $e\nu$  channel in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **87**, 231803 (2001) [arXiv:hep-ex/0107008].

T. Affolder *et al.*, “Searches for new physics in events with a photon and b-quark jet at CDF,” Phys. Rev. D **65**, 052006 (2002) [arXiv:hep-ex/0106012].

T. Affolder *et al.*, “Search for gluinos and squarks using like-sign dileptons in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **87**, 251803 (2001) [arXiv:hep-ex/0106061].

T. Affolder *et al.*, “Measurement of  $d(\sigma)/dM$  and forward-backward charge asymmetry for high mass Drell-Yan  $e^+e^-$  pairs from  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **87**, 131802 (2001) [arXiv:hep-ex/0106047].

T. Affolder *et al.*, “Cross section and heavy quark composition of  $\gamma + \mu$  events produced in  $p$  anti- $p$  collisions,” Phys. Rev. D **65**, 012003 (2002) [arXiv:hep-ex/0106004].

T. Affolder *et al.*, “Search for gluinos and scalar quarks in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$  using the missing energy plus multijets signature,” Phys. Rev. Lett. **88**, 041801 (2002) [arXiv:hep-ex/0106001].

T. Affolder *et al.*, “Production Of  $\chi_1/C1$  And  $\chi_1/C2$  In  $P$  Anti- $P$  Collisions At  $S^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **86**, 3963 (2001).

T. Affolder *et al.*, “Double diffraction dissociation at the Fermilab Tevatron collider,” Phys. Rev. Lett. **87**, 141802 (2001) [arXiv:hep-ex/0107070].

T. Affolder *et al.*, “Search for narrow diphoton resonances and for  $\gamma\gamma + W/Z$  signatures in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **64**, 092002 (2001) [arXiv:hep-ex/0105066].

T. Affolder *et al.*, “Measurement of the inclusive jet cross section in anti- $p$   $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **64**, 032001 (2001) [Erratum-ibid. D **65**, 039903 (2002)] [arXiv:hep-ph/0102074].

T. Affolder *et al.*, “Measurement of the  $t$  anti- $t$  production cross section in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **64**, 032002 (2001) [Erratum-ibid. D **67**, 119901 (2003)] [arXiv:hep-ex/0101036].

T. Affolder *et al.*, “First measurement of the ratio  $B(t \rightarrow W b)/B(t \rightarrow W q)$  and associated limit on the CKM element  $|V_{tb}|$ ,” Phys. Rev. Lett. **86**, 3233 (2001) [arXiv:hep-ex/0012029].

T. Affolder *et al.*, “Measurement of the two-jet differential cross section in proton antiproton collisions at  $s^{**}(1/2) = 1800\text{-GeV}$ ,” Phys. Rev. D **64**, 012001 (2001) [Erratum-ibid. D **65**, 039902 (2002)] [arXiv:hep-ex/0012013].

T. Affolder *et al.*, “Measurement of the top quark  $p(T)$  distribution,” Phys. Rev. Lett. **87**, 102001 (2001).

T. Affolder *et al.*, “Search for the supersymmetric partner of the top quark in  $p$  anti- $p$  collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **63**, 091101 (2001) [arXiv:hep-ex/0011004].

T. Affolder *et al.*, “Search for neutral supersymmetric Higgs bosons in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **86**, 4472 (2001) [arXiv:hep-ex/0010052].

T. Affolder *et al.*, “Test of enhanced leading order QCD in W boson plus jets events from 1.8-TeV anti-p p collisions,” Phys. Rev. D **63**, 072003 (2001).

T. Affolder *et al.*, “Measurement of the W boson mass with the Collider Detector at Fermilab,” Phys. Rev. D **64**, 052001 (2001) [arXiv:hep-ex/0007044].

T. Affolder *et al.*, “Measurement of the decay amplitudes of  $B^0 \rightarrow J/\psi K^*0$  and  $B/s^0 \rightarrow J/\psi \Phi$  decays,” Phys. Rev. Lett. **85**, 4668 (2000) [arXiv:hep-ex/0007034].

T. Affolder *et al.*, “Measurement of the top quark mass with the Collider Detector at Fermilab,” Phys. Rev. D **63**, 032003 (2001) [arXiv:hep-ex/0006028].

T. Affolder *et al.*, “Measurement of  $d(\sigma)/dy$  for high mass Drell-Yan  $e^+ e^-$  pairs from p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. D **63**, 011101 (2001) [arXiv:hep-ex/0006025].

T. Affolder *et al.*, “Dijet production by double pomeron exchange at the Fermilab Tevatron,” Phys. Rev. Lett. **85**, 4215 (2000).

T. Affolder *et al.*, “Measurement of J/psi and psi(2S) polarization in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **85**, 2886 (2000) [arXiv:hep-ex/0004027].

T. Affolder *et al.*, “Direct measurement of the W boson width in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **85**, 3347 (2000) [arXiv:hep-ex/0004017].

T. Affolder *et al.*, “Search for second and third generation leptoquarks including production via technicolor interactions in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **85**, 2056 (2000) [arXiv:hep-ex/0004003].

T. Affolder *et al.*, “Limits on gravitino production and new processes with large missing transverse energy in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **85**, 1378 (2000) [arXiv:hep-ex/0003026].

T. Affolder *et al.*, “Diffractive dijets with a leading antiproton in anti-p p collisions at  $s^{**}(1/2) = 1800\text{-GeV}$ ,” Phys. Rev. Lett. **84**, 5043 (2000).

T. Affolder *et al.*, “Search for new particles decaying to t anti-t in p anti-p collisions at  $s^{**}(1/2) = 1.8\text{-TeV}$ ,” Phys. Rev. Lett. **85**, 2062 (2000) [arXiv:hep-ex/0003005].

### Publications as Member of ZEUS Collaboration

J. Breitweg *et al.*, “Measurement of dijet production in neutral current deep inelastic scattering at high  $Q^{**2}$  and determination of  $\alpha(s)$ ,” Phys. Lett. B **507**, 70 (2001) [arXiv:hep-ex/0102042].

J. Breitweg *et al.*, “Measurement of open beauty production in photoproduction at HERA,” Eur. Phys. J. C **18**, 625 (2001) [arXiv:hep-ex/0011081].

J. Breitweg *et al.*, “Measurement of dijet cross sections for events with a leading neutron in photoproduction at HERA,” Nucl. Phys. B **596**, 3 (2001) [arXiv:hep-ex/0010019].

- J. Breitweg *et al.* , “A search for resonance decays to anti- $\nu$  jet in  $e^+ p$  scattering at HERA,” *Phys. Rev. D* **63**, 052002 (2001) [arXiv:hep-ex/0009059].
- J. Breitweg *et al.* , “Measurement of the proton structure function  $F_2$  at very low  $Q^{*2}$  at HERA,” *Phys. Lett. B* **487**, 53 (2000) [arXiv:hep-ex/0005018].
- J. Breitweg *et al.* , “Measurement of inclusive  $D/s^+$  photoproduction at HERA,” *Phys. Lett. B* **481**, 213 (2000) [arXiv:hep-ex/0003018].
- J. Breitweg *et al.* , “Measurement of azimuthal asymmetries in deep inelastic scattering,” *Phys. Lett. B* **481**, 199 (2000) [arXiv:hep-ex/0003017].
- J. Breitweg *et al.* , “Search for resonances decaying to  $e^+$  jet in  $e^+ p$  interactions at HERA,” *Eur. Phys. J. C* **16**, 253 (2000) [arXiv:hep-ex/0002038].
- J. Breitweg *et al.* , “The  $Q^{*2}$  dependence of dijet cross sections in  $\gamma p$  interactions at HERA,” *Phys. Lett. B* **479**, 37 (2000) [arXiv:hep-ex/0002010].
- J. Breitweg *et al.* , “Measurement of inclusive prompt photon photoproduction at HERA,” *Phys. Lett. B* **472**, 175 (2000) [arXiv:hep-ex/9910045].
- J. Breitweg *et al.* , “Measurement of the  $E(T_{\text{jet}})^{*2}/Q^{*2}$  dependence of forward-jet production at HERA,” *Phys. Lett. B* **474**, 223 (2000) [arXiv:hep-ex/9910043].
- J. Breitweg *et al.* , “Measurement of diffractive photoproduction of vector mesons at large momentum transfer at HERA,” *Eur. Phys. J. C* **14**, 213 (2000) [arXiv:hep-ex/9910038].
- J. Breitweg *et al.* [ZEUS Collaborations], “Measurement of the spin-density matrix elements in exclusive electroproduction of  $\rho^0$  mesons at HERA,” *Eur. Phys. J. C* **12**, 393 (2000) [arXiv:hep-ex/9908026].
- J. Breitweg *et al.* , “Measurement of  $D^{*+}$  production and the charm contribution to  $F_2$  in deep inelastic scattering at HERA,” *Eur. Phys. J. C* **12**, 35 (2000) [arXiv:hep-ex/9908012].
- J. Breitweg *et al.* , “ $W$  production and the search for events with an isolated high-energy lepton and missing transverse momentum at HERA,” *Phys. Lett. B* **471**, 411 (2000) [arXiv:hep-ex/9907023].
- J. Breitweg *et al.* , “Measurement of high- $Q^{*2}$  charged-current  $e^+ p$  deep inelastic scattering cross sections at HERA,” *Eur. Phys. J. C* **12**, 411 (2000) [Erratum-ibid. C **27**, 305 (2003)] [arXiv:hep-ex/9907010].
- J. Breitweg *et al.* , “Angular and current-target correlations in deep inelastic scattering at HERA,” *Eur. Phys. J. C* **12**, 53 (2000) [arXiv:hep-ex/9905050].
- J. Breitweg *et al.* , “Measurement of dijet photoproduction at high transverse energies at HERA,” *Eur. Phys. J. C* **11**, 35 (1999) [arXiv:hep-ex/9905046].
- J. Breitweg *et al.* , “Search for contact interactions in deep inelastic  $e^+ p \rightarrow e^+ X$  scattering at HERA,” *Eur. Phys. J. C* **14**, 239 (2000) [arXiv:hep-ex/9905039].
- J. Breitweg *et al.* , “Measurement of high- $Q^{*2}$  neutral-current  $e^+ p$  deep inelastic scattering cross-sections at HERA,” *Eur. Phys. J. C* **11**, 427 (1999) [arXiv:hep-ex/9905032].

J. Breitweg *et al.* , “Measurement of multiplicity and momentum spectra in the current and target regions of the Breit frame in deep inelastic scattering at HERA,” *Eur. Phys. J. C* **11**, 251 (1999) [arXiv:hep-ex/9903056].

J. Breitweg *et al.* , “Measurement of three-jet distributions in photoproduction at HERA,” *Phys. Lett. B* **443**, 394 (1998) [arXiv:hep-ex/9810046].

J. Breitweg *et al.* , “ZEUS results on the measurement and phenomenology of F2 at low x and low  $Q^{*2}$ ,” *Eur. Phys. J. C* **7**, 609 (1999) [arXiv:hep-ex/9809005].

J. Breitweg *et al.* , “Exclusive electroproduction of  $\rho^0$  and  $J/\psi$  mesons at HERA,” *Eur. Phys. J. C* **6**, 603 (1999) [arXiv:hep-ex/9808020].

J. Breitweg *et al.* , “Measurement of elastic Upsilon photoproduction at HERA,” *Phys. Lett. B* **437**, 432 (1998) [arXiv:hep-ex/9807020].

J. Breitweg *et al.* , “Measurement of the diffractive cross section in deep inelastic scattering using ZEUS 1994 data,” *Eur. Phys. J. C* **6**, 43 (1999) [arXiv:hep-ex/9807010].

J. Breitweg *et al.* , “Measurement of inclusive  $D^{*+}$  and associated dijet cross sections in photoproduction at HERA,” *Eur. Phys. J. C* **6**, 67 (1999) [arXiv:hep-ex/9807008].

J. Breitweg *et al.* , “Search for selectron and squark production in  $e^+ p$  collisions at HERA,” *Phys. Lett. B* **434**, 214 (1998) [arXiv:hep-ex/9806019].

J. Breitweg *et al.* , “Forward jet production in deep inelastic scattering at HERA,” *Eur. Phys. J. C* **6**, 239 (1999) [arXiv:hep-ex/9805016].

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J. Breitweg *et al.* , “Measurement of jet shapes in high- $Q^{*2}$  deep inelastic scattering at HERA,” *Eur. Phys. J. C* **8**, 367 (1999) [arXiv:hep-ex/9804001].

J. Breitweg *et al.* , “High- $E(T)$  inclusive jet cross sections in photoproduction at HERA,” *Eur. Phys. J. C* **4**, 591 (1998) [arXiv:hep-ex/9802012].

J. Breitweg *et al.* , “Measurement of the t distribution in diffractive photoproduction at HERA,” *Eur. Phys. J. C* **2**, 237 (1998) [arXiv:hep-ex/9712019].

J. Breitweg *et al.* , “Elastic and proton-dissociative  $\rho^0$  photoproduction at HERA,” *Eur. Phys. J. C* **2**, 247 (1998) [arXiv:hep-ex/9712020].

J. Breitweg *et al.* , “Charged particles and neutral kaons in photoproduced jets at HERA,” *Eur. Phys. J. C* **2**, 77 (1998) [arXiv:hep-ex/9711018].

J. Breitweg *et al.* , “Event shape analysis of deep inelastic scattering events with a large rapidity gap at HERA,” *Phys. Lett. B* **421**, 368 (1998) [arXiv:hep-ex/9710027].

J. Breitweg *et al.* , “Dijet cross sections in photoproduction at HERA,” *Eur. Phys. J. C* **1**, 109 (1998) [arXiv:hep-ex/9710018].

J. Breitweg *et al.* , “Observation of scaling violations in scaled momentum distributions at HERA,” *Phys. Lett. B* **414**, 428 (1997) [arXiv:hep-ex/9710011].

J. Breitweg *et al.* , “Measurement of jet shapes in photoproduction at HERA,” *Eur. Phys. J. C* **2**, 61 (1998) [arXiv:hep-ex/9710002].

- J. Breitweg *et al.* , “Measurement of the diffractive structure function  $F_2(D(4))$  at HERA,” *Eur. Phys. J. C* **1**, 81 (1998) [arXiv:hep-ex/9709021].
- J. Breitweg *et al.* , “Measurement of inelastic  $J/\psi$  photoproduction at HERA,” *Z. Phys. C* **76**, 599 (1997) [arXiv:hep-ex/9708010].
- J. Breitweg *et al.* , “Measurement of the proton structure function  $F_2$  and  $\sigma(\text{tot})(\gamma^* p)$  at low  $Q^{*2}$  and very low  $x$  at HERA,” *Phys. Lett. B* **407**, 432 (1997) [arXiv:hep-ex/9707025].
- J. Breitweg *et al.* , “A search for excited fermions in  $e^+ p$  collisions at HERA,” *Z. Phys. C* **76**, 631 (1997) [arXiv:hep-ex/9708007].
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